



Tribhuvan University

Faculty of Humanities and Social Sciences

OFFICE OF THE DEAN

2018

BCA First Semester

Subject: Computer Fundamentals

Time: 3hr

Full Marks:60

Pass Marks: 24

Group B

Attempt any SIX questions. [6x5=30]

2. Define Computer. Explain the anatomy of digital computer with block diagram.
3. Define Operating System. Explain the functions of Operating System.
4. Define DBMS. Explain the different database models with their merits and demerits.
5. Explain the different types of LAN topologies with their advantages and disadvantages.
6. What is WWW? Differentiate between intranet, extranet and internet with example.
7. What are contemporary technologies? Explain any two contemporary technologies with roles.
8. Write the DOS commands to complete following tasks.
 - a. Create sub directory theory and practical inside d:\exam\
 - b. Create the file name marks.txt inside theory writing the content, "Theory marks in CFA".
 - c. Rename the file name marks.txt with CFAMarks.txt.
 - d. Make hidden the file CFAMarks.txt.
 - e. Search the all files with .pdf extension.

Group C

Attempt any TWO questions.[2x10=20]

9. i) You are provided following data:

Bageswori Secondary School

Surkhet



Mark - Ledger

	D	E	F	G	H	I	J	K	L	M
11	Name	Eng.	Nep.	Eco.	Sociology.	Computer	Total	Percentage	Result	Division
12	Gautam	56	56	76	75	68				
13	Saru	67	54	64	64	76				
14	Binod	87	65	54	59	66				
15	Ritu	45	67	56	72	85				
16	Rabindra	89	34	63	59	52				

Write the formula in spread sheet package to calculate following on basis on given conditions:

1. Calculate Total marks. [1]
 2. Calculate Percentage. [1]
 3. Mark the student with either "PASS" or "FAIL" [Pass Marks 35]. [1.5]
 4. Calculate the division [if percentage ≥ 60 then First, if percentage ≥ 45 and percentage < 60 then Second, if percentage ≥ 35 and percentage < 45 then Third otherwise "xxx"] [1.5]
10. i) Define computer peripherals. Differentiate between impact and non-impact printers. [1+4]
ii) Define Presentation. Write the features of good presentation package. [5]
11. Define CMYK color model. Explain the basic tools and transforms available in Photoshop. [10]



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2019

BCA First Semester

Subject: Computer Fundamentals

Time: 3hr

Full Marks:60

Pass Marks: 24

Group B

Attempt any Six question

2. What is Operating system? Explain the major functions of Operating System.
3. Differentiate between primary and secondary memory.
4. What is computer virus? Explain symptoms of computer virus.
5. Define database? Explain the advantages of database over file-based system.
6. What is proxy server? Write down the benefit of using proxy server in the organization.
7. Define e-commerce? Mention the benefits of using it in the context of customer?
8. Consider the following structure and answer the questions.

```
E:\ ROOT
|---dir_1
| | file_1.txt
| | file_2.txt
| |___dir_3
|---dir_2
    file_2.txt
```

- a) Write down DOS command to create above files and directories. [2] b) Write down DOS command to move all text file into dir_3 directory. [1] c) Write DOS command to delete dir_1 directory. d) Hide the root directory from E drive.

Group C

Attempt any Two question

9. a) From the following spreadsheet, write the formula to address the following conditions:



ABC Company

Kathmandu

	A	B	C	D	E	F	G	H	I
1	SN	Name	Addr	Post	Salary	Bonus	Tax	HA	Total
2	1	Ram	Ktm	Manager	12000				
3	2	Sham	Pokhara	Accountant	11500				
4	3	Hari	Pokhara	Engineer	10000				
	Maximum Salary				10000				

Condition

1. Bonus will give 15% of salary. If his/her salary is less than equal to 6000
 2. Tax will pay 10% of salary if his/her post is manager
 3. HA will get 5% of salary, if he/she is not from ktm
 4. Total is equal to the sum of (salary, bonus and HA) by deducting the Tax
 5. Write a formula to find the maximum salary above the excel sheet.
- b) What is Photoshop? Explain five major tools of Photoshop.
10. a) What is word processor? Explain the major function available in the home tab of word document.
- b) Define Network Topology? Write down the advantage of Network
11. a) What is animation? What are the advantages of using slide master in Powerpoint?
- b) Explain block diagram of computer and its various components.



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2020

BCA First Semester

Subject: Computer Fundamentals

Full Marks:60

Time: 3hr

Pass Marks: 24

Group B

Attempt any SIX questions. [6x5 = 30]

2. Who is database administrator? Explain the major roles and responsibilities of DBA. [1 + 4]
3. Define operating system? Explain the open-source operating system.[1 + 4]
4. What is ergonomic keyboard? Explain working mechanism of keyboard.[1+4]
5. Explain different types of computer on the basis of size and power.[5]
6. What is DBMS? Explain Relational database model with suitable diagram.[5]
7. Prepare a specification of personal computer which you want to purchase.[1+4]
8. Explain any five DOS command with suitable example.[5]

Group C

Attempt any TWO Questions

9. Prepare following spreadsheet:

ABC Campus

Kathmandu

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	S N	Nam e	CF A	Logi c	Mat h	So Tech	Englis h	Tota l	Pe r	Resu lt	Grad e	Ran k	Remar k
2	1	Ram	45	56	54	44	45	?	?	?	?	?	?
3	2	Sha m	50	45	53	45	45	?	?	?	?	?	?
4	3	Hari	46	44	45	46	45	?	?	?	?	?	?



Conditions:

- a. Write appropriate formula to find the total marks of each students.[1]
 - b. Write formula to find out the percentage of each student.[1]
 - c. Result is passed if student score at least 40% marks in each subject.[2]
 - d. Write a formula to calculate grade of student based on percentage. (A for ≥ 90 , B for ≥ 80 , C for ≥ 70 , D for ≥ 60 , E for ≥ 40)[3]
 - e. Write a formula to find rank of individual student who has passed result.[1]
 - f. Write a remarks base on following conditions:[2] ("Excellent" for A grade,"Good" for B, "Fair" for C, "Moderate" for D and "Satisfactory" for E)
10. a) What is mail merge? Explain the major functions available in the Review tab of word document.[1 + 4]
10. b)What is Photoshop? Write the steps to create MRP sized photograph in JPEG format.[1+4]
11. Define Computer Network? Explain OSI model in detail.[2 + 8]